Appl. No. 09/975,423
Reply to Final Office Action of April 21, 2005

Docket No. RTN-138PUS

REMARKS

Applicants respectfully request the Examiner to reconsider the claims as amended in accordance with the provisions of 37 C.F.R §1.116.

Claims 1-23 are pending in the application. Claims 1-23 are rejected. Claims, 1, 4, 6, and 18 are amended herein.

Applicants have amended Claims 1, 4, and 6 herein in an effort to improve the clarity of the claims as will be apparent, and not for reasons of patentability. Applicants have also amended Claim 18 herein to correct a typographical error, and not for reasons of patentability.

Before processing with a discussion of the rejections set forth in the Office Action dated April 21, 2005, Applicants thought it may first be helpful to briefly discuss the instant invention defined by the below claims and also to discuss the Huang reference used by the Examiner in the rejections set forth in the Office Action.

Huang et al. describes a system in which data stored in a memory of a first computer (or processing system) can be read by another computer (or processing system) coupled to the first computer via a network. Huang et al. refers to computers doing the reading as ""friends" of the first computer from which the data is read. The friends, therefore, necessarily have direct access to the data memory of the first computer.

In contrast, the present invention is directed toward a method and apparatus in which data stored in a memory associated with a computer or processor (referred to as a "first sharing partner") can be replicated on a write-only data path (i.e., written) by the first sharing partner to other sharing partners. More particularly, the present invention provides a secure sharing of data for which an owner of the data (i.e., a first sharing partner) can replicate (i.e. write on a write-only data path) a copy of the private data portion to one or more selected sharing partners. Therefore, a selected sharing partner is not able to alter or access the data retained by the owner

Appl. No. 09/975,423   Docket No. RTN-138PUS
Reply to Final Office Action of April 21, 2005

of the data, allowing the claimed *private data portion* retained by the owner of the data to remain secure. Thus, the other sharing partners have no direct access to the data memory of the first sharing partner, and the data in the first sharing partner data memory is, therefore, secure.

Thus, while data stored in the memory of the first computer in Huang, et al. can be accessed by other computers, the data stored in the memory of a sharing partner as recited in the instant claims, cannot be accessed by any other computers or processors. Applicants view this as a fundamental and important difference between Huang, et al and the claims of the instant application.

Turning now to the specific rejections set forth in the Office Action, the Examiner rejects Claims 1-12 and 15-23 under 35 U.S.C. §103(a) as being unpatentable over Huang et al. (U.S. Patent number 6,571,245).

Applicants submit that Claim 1 is patentably distinct over Huang et al., since the cited reference neither describes nor suggests [a] method for data sharing, comprising ... storing private data within a private data memory associated with a first sharing partner ... selecting a portion of the private data to provide a private data portion; selecting one or more sharing partners associated with the first sharing partner ... associating the private data portion with the one or more selected sharing partners ... and replicating the private data portion to each one of the one or more selected sharing partners as respective replicated data on respective write-only data paths," as set forth in Claim 1.

The Examiner asserts that Huang et al. teaches substantially all of the elements set forth in Claim 1. The Examiner recognizes that "Huang does not specifically disclose replicating the selected data to the selected sharing partners as respective replicated data on respective write-only data paths."

The Examiner, however, uses Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960), as a basis for asserting that "...it is obvious to replicate the invention to produce the intended result."

Page 8 of 19

Appl. No. 09/975,423   Docket No. RTN-138PUS
Reply to Final Office Action of April 21, 2005

The Examiner further asserts that "Huang...discloses synchronizing data on respective write-only data path... ." The Examiner still further asserts that "the Office takes the term 'write-only data path' to be construed as one way communications, such as the synchronization of profiles from the central database with the local PC, this only happens one way... ." Applicants respectfully disagree with all of the Examiner's assertions.

As the Examiner is aware, and as found in MPEP §2142, in order to establish a prima facie case of obviousness "...the prior art reference (or prior art references when combined) must teach or suggest all the claim limitations." Applicants respectfully submit that the Examiner has not met this burden in order to establish prima facie obviousness.

Thus, Claim 1 is directed to a method in which data stored in the memory associated with a first sharing partner can be replicated on a write-only data path (i.e., written) by the first sharing partner to other sharing partners. More particularly, the present invention provides a secure sharing of data for which an owner of the data (i.e., a first sharing partner) can replicate (i.e. write on a write-only data path) a copy of the private data portion to one or more selected sharing partners. Therefore, a selected sharing partner is not able to alter or access the data retained by the owner of the data, allowing the claimed *private data portion* retained by the owner of the data to remain secure.

Applicants submit that a variety of **access privileges are *notoriously*** well known, including, but not limited to, a write-only access privilege and a read-only access privilege. Access privileges are often used in regard to data and files. However, data paths, which are known at least in the fields of computers and networks, can also have access privileges. A write-only data path is a data path on which an owner of data can send (write) the data to a recipient. It should be recognized that an intended recipient cannot send a request for the data on a write-only data path. In contrast, a read-only data path is a data path from which the recipient of the data can requests (read) the data from the owner of the data.

Page 9 of 19

Appl. No. 09/975,423
Reply to Final Office Action of April 21, 2005

In contrast, Applicants submit that Huang et al. does not describe access privileges associated with data paths, but rather describes access privileges associated with files. As described, for example, by Huang et al., at column 10, lines 4-14:

> The limited access folder is accessed by clicking on friends folder icon 626 to open a friends folder window 650. The limited access folder contains protected files that are accessible only by those specifically authorized by the user. The extent of the access is also limited to the rights granted by the user, which may include *read only, read and write, and others*. [emphasis added] Each limited access file can be individually tailored with different rights granted to different "friends." For example, friend A may be granted read only access to file X, friend B may be granted full access to the same file, and so on.

Applicants understand the "limited access folder" of Huang et al. to be the "friends" folder 626, 650 of FIG. 6. Applicants submit that if the friends of Huang et al. were to have read-only access to the files 650, the friends would be able to *read* the files 650, giving them direct access. Applicants further submit that, even if the friends of Huang et al. were to have write-only access privileges to the *files* 650, the friend would be able to write to the files 650. In neither case would the files 650 be *written* to the friends on *write-only data paths*.

The Examiner's reliance on Harza, is not entirely clear to Applicants.

The Examiner concedes that Huang does not disclose the replicating step recited in claim 1 and it appears to Applicants that the Examiner relies on Harza for this claim element. This reliance is clearly mis-placed as Harza has nothing to do with replicating data on write only data paths as called for in claim 1.

In view of the Examiner's reliance on Harza, it is Applicants' position that on this basis alone, the rejection under 35 USC §103(a) cannot stand since the Examiner concedes that Huang does not disclose the replicating step and that the Examiner has not provided any argument other than Harza to assert that the replicating step is shown in the references being relied upon in the rejection.

Page 10 of 19

With regard to the Examiner's assertion regarding the synchronization of Huang et al., Applicants submit that Huang et al. does not describe or suggest the claimed _write-only data paths_. The Examiner uses the synchronizing (column 13, lines 40-46) of Huang et al., which describes:

> When enabled by the user, a synchronization application 1050 runs in the background on the local PC. At the designated times, application 1050 updates the personal information on the local PC with the information from database 1030. In this manner, the personal information on the local PC is synchronized with that from the central database.

As recited above, Huang describes that the synchronization application 1050 "_runs ...on the local PC_," which receives the data. Therefore, the synchronization application must provide either a read-only, or a read-write data path, either one of which allows the local PC to directly access the database 1030, resulting in a less secure database. In contrast, the present invention provides the claimed write-only data path, which, as described above, allows the private data retained by the owner of the data to remain secure (i.e., it is not alterable by the selected sharing partner).

With regard to the Examiner's assertion that a write-only data path is merely a one-way data path, Applicants again respectfully disagree and submit that the Examiner has mischaracterized the claimed _write-only data path_. Applicants, for example, submit that a read-only data path is also a one-way data path, yet a read-only data path is not that which is claimed. Applicants submit that the claimed _write-only data path_ is distinctly different than a read-only data path.

As described above, Applicants submit that a write-only data path is a data path on which an owner of data can send (write) the data to a recipient. It should be recognized that an intended recipient cannot send a request for the data on a write-only data path. In contrast, a read-only data path is a data path from which the recipient of the data can requests (read) the data from the owner of the data.

Appl. No. 09/975,423
Reply to Final Office Action of April 21, 2005

Docket No. RTN-138PUS

Applicants submit that the intended meaning of the claimed "write-only data path" of Claim 1 is clear from the claim language and from the specification. Applicants submit that the language of Claim 1 clearly specifies that the claimed "private data portion" is stored within a private data memory associated with a first sharing partner. Applicants still further submit that the language of Claim 1 clearly specifies that the claimed "replicating the private data portion *to* each one of the one or more selected sharing partners as respective replicated data on respective *write-only data paths*" is in a direction from the first sharing partner to the one or more selected sharing partners. Therefore, the first sharing partner replicates to the write-only data path (i.e., *writes*) in a direction toward the one or more sharing partners.

In view of the above, Applicants submit that Claim 1 is patentably distinct over Huang et al.

Claims 2-11 depend from and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 2-11 are patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 1.

Applicants submit that Claim 2 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "...creating a data tag, including one or more of a first sharing partner tag portion associated with the first sharing partner, a selected sharing partners tag portion associated with the one or more selected sharing partners, a data identifier tag portion, and a data time identifier tag portion; and associating the data tag with *the private data portion to provide tagged private data*," as set forth in Claim 2.

The claimed private data portion and the claimed tagged private data are *private*. With this particular arrangement, sharing partners do not have access to the private data portion or the claimed tagged private data via any means. For example, in one particular arrangement, tagged private data 42, 44a in a private data memory 20 (FIG. 1B) of a sharing partner A 12 (FIG. 1B) is not accessible to a sharing partner B 14 (FIG. 1B). However, the private data 42, 44a can be provided to the sharing partner A 12. In contrast, Huang et al. does not describe or suggest a

private data portion, which is tagged as claimed and which is associated with a sharing partner. Instead, Huang et al. allows friends to access data in a "friends" folder. Data in the friends folder is not private.

With regard to Claim 2, The Examiner uses FIG. 7 of Huang et al. to show the claimed tagged private data. However, Applicants submit that FIG. 7 of Huang et al. shows data in a "friends" folder (e.g., friends folder 626, 650 of FIG. 6), which is not private data, but which is accessible by the friends.

Applicants submit that Claim 3 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "...*creating a copy* of the tagged private data to provide *a tagged private data copy*; placing the tagged private data copy into a first shared data memory associated with the first sharing partner to provide *a tagged shared data copy*; and associating the tagged shared data copy with a respective one of the one or more selected sharing partners indicated by the selected sharing partners tag portion," as set forth in Claim 3.

The claimed tagged private data copy is a copy of the claimed tagged private data. With this particular arrangement, sharing partners can have the tagged private data copy written to them, leaving the tagged private data completely inaccessible. The tagged private data copy essentially provides an intermediate version of the data. For example, in one particular arrangement, a tagged private data copy 46a (FIG. 1B) in a shared data memory 22 (FIG. 1B) of a sharing partner A 12 (FIG. 1B) is copied to a sharing partner B 14 (FIG. 1B), providing a tagged shared data copy 44b, 46a. The tagged private data 42, 44a remains inaccessible. In contrast, Huang et al. does not describe or suggest a tagged private data copy.

With regard to Claim 3, the Examiner asserts that Huang discloses the "creating a copy of the tagged private data to provide a tagged private data copy... ." Applicants respectfully disagree. Applicants submit that data (files) are merely designated by Huang et al. as being private, published, or friends files and, referring to FIG. 6 of Huang et al. are put into a private folder 622, a publish folder 624, or a friends folder 626 accordingly. Huang et al. does not copy

Page 13 of 19

the private data. The Examiner, however asserts that it is obvious that all files can be duplicated and that "...it would be obvious to make this correlation... ." Applicants respectfully disagree.

Applicants submit that they have provided a solution to the problem of data security in a way, which others have not recognized. Applicants submit that some embodiments of the present invention, which copy the private data to generate the claimed *tagged private data copy* and the *claimed tagged shared data cop.* provide an extra level of security for the private data. The private data remains inaccessible to the sharing partners. The sharing partners have contact only with the tagged shared data copy.

Applicants submit that Claim 4 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "...replicating the private data portion to the one or more selected sharing partners includes *copying the tagged shared data copy to a second shared data memory associated with the respective one of the one or more selected sharing partners on a respective one of the write-only data paths to provide a tagged replicated data copy*," as set forth in Claim 4.

As described above, Huang et al. fails to describe or suggest the claimed write-only data path. Also as described above, Huang et al. fails to describe or suggest the claimed tagged shared data copy.

Applicants submit that Claim 5 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... the copying includes *copying the tagged shared data copy on the write-only data path* between the first shared data memory and the second shared data memory," as set forth in Claim 5.

As described above, Huang et al. fails to describe or suggest the claimed write-only data path. Also as described above, Huang et al. fails to describe or suggest the claimed tagged shared data copy.

Applicants submit that amended Claim 6 is *further* patentably distinct over Huang et al,
since the cited references neither describes nor suggests "...replicating the private data portion to
the one or more selected sharing partners includes *copying the tagged private data copy to a
second shared data memory associated with a respective one of the one or more selected sharing
partners on a respective one of the one or more write-only data paths to provide a tagged
replicated data copy*," as set forth in amended Claim 6.

As described above, Huang et al. fails to describe or suggest the claimed write-only data
path. Also as described above, in Huang et al., data in the private folder 622 (FIG. 6 of Huang et
al.) is not shared to the friends, rather data in a friends folder 626 is shared.

Applicants submit that Claim 7 is *further* patentably distinct over Huang et al, since the
cited references neither describes nor suggests "... the copying includes copying the tagged
private data copy on a respective one of the *write-only data paths* between the first private data
memory and the second shared data memory," as set forth in Claim 7.

As described above, Huang et al. fails to describe or suggest the claimed write-only data
paths.

Applicants submit that Claim 12 is *further* patentably distinct over Huang et al, since the
cited references neither describes nor suggests "... automatically changing the tagged shared data
copy and the tagged replicated data copy *in accordance with the tagged private data* when the
tagged private data is altered by the first sharing partner," as set forth in Claim 12.

As described above, in Huang et al., data in the private folder 622 (FIG. 6 of Huang et
al.) is not shared to the friends, rather data in a friends folder 626 is shared. Therefore, only
updates to data in the friends folder are provided to the friends.

For substantially the same reasons described above in conjunction with Claim 1,
Applicants submit that Claim 15 is patentably distinct over Huang et al, since the cited references

Page 15 of 19

neither describes nor suggests "[a] data sharing apparatus comprising...a first sharing partner...a second sharing partner...and *a write-only data path coupled between the first sharing partner and the second sharing partner to allow the first sharing partner to write replicated data to the second sharing partner*," as set forth in Claim 15.

As described above, a write-only data path is a data path on which an owner of data can send (write) the data to a recipient.

Claims 16-23 depend from and thus include the limitations of Claim 15. Thus, Applicants submit that Claims 16-23 are patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 15.

Applicants submit that Claim 16 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... the first sharing partner server further includes a first shared data memory adapted to receive copied data in accordance with the private data portion and the second sharing partner server includes a second shared data memory adapted to receive the replicated data in accordance with the copied data from the first shared data memory on *the write-only data path*," as set forth in Claim 16.

Applicants submit that Claim 17 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "...the second sharing partner server comprises a second shared data memory adapted to receive the replicated data in accordance with the private data portion from the private data memory on the *write-only data path*," as set forth in Claim 17.

Applicants believe that the Examiner has incorrectly included claims 18 and 19 in the rejection over Huang et al. Claims 18 and 19 are included in claims rejected over Huang et al. in view of Pike discussed blow. Nevertheless, Applicants will respond according to the rejections set forth by the Examiner.

Appl. No. 09/975,423   Docket No. RTN-138PUS
Reply to Final Office Action of April 21, 2005

Applicants submit that Claim 18 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... the one or more selected sharing partners are associated with *military allies*, and the first private data portion corresponds to *military data*," as set forth in Claim 18.

Applicants submit that Claim 19 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... the *military allies* are in different countries," as set forth in Claim 19.

Applicants submit that Claim 20 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... automatically updating the tagged replicated data copy in accordance with the private data portion when the *private data portion* is altered by the first sharing partner," as set forth in Claim 20.

As described above, in Huang et al., data in the private folder 622 (FIG. 6 of Huang et al.) is not shared to the friends, rather data in a friends folder 626 is shared. Therefore, only updates to data in the friends folder are provided to the friends.

Applicants submit that Claim 21 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "... automatically updating the replicated data in accordance with the private data portion when the *private data portion* is altered by the first sharing partner," as set forth in Claim 21.

As described above, in Huang et al., data in the private folder 622 (FIG. 6 of Huang et al.) is not shared to the friends, rather data in a friends folder 626 is shared. Therefore, only updates to data in the friends folder are provided to the friends.

Applicants submit that Claim 23 is *further* patentably distinct over Huang et al, since the cited references neither describes nor suggests "...a second *write-only data path* coupled between

Page 17 of 19

Appl. No. 09/975,423
Reply to Final Office Action of April 21, 2005

Docket No. RTN-138PUS

the second sharing partner server and the first sharing partner server to allow the second sharing partner to write second replicated data to the first sharing partner," as set forth in Claim 23.

The Examiner rejects Claims 13, 14, 18, 19 under 35 U.S.C. §103(a) as being unpatentable over Huang et al. in view of Pike et al. (Defense Data Network, Defense Secure Network; FAS Intelligence Resource Program; February 11, 2000...).

Claims 13 and 14 depend from and thus include the limitations of Claim 1. Thus, Applicants submit that Claims 13 and 14 are patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 1.

Claims 18 and 19 depend from and thus include the limitations of Claim 15. Thus, Applicants submit that Claims 13 and 14 are patentably distinct over the cited reference at least for the reasons discussed above in conjunction with Claim 15.

In view of the above, Applicants submit that Claims 13, 14, 18, and 19 are patentably distinct over Huang et al., whether taken alone or in combination with Pike et al.

In view of the above, Applicants submit that the rejection of Claims 1-23 under 35 U.S.C. §103(a) should be removed.

In view of the above Amendment and Remarks, Applicants submit that Claims 1-23 and the entire case are in condition for allowance and should be sent to issue and such action is respectfully requested.

It is submitted that this amendment places the application in condition for allowance or in better form for consideration on appeal, and thus, entry of this amendment is respectfully requested under the provisions of 37 C.F.R. §1.116.

Docket No. RTN-138PUS

Appl. No. 09/975,423
Reply to Final Office Action of April 21, 2005

The Examiner is respectfully invited to telephone the undersigning attorney if there are any questions regarding this Amendment or this application.

The Assistant Commissioner is hereby authorized to charge payment of any additional fees associated with this communication or credit any overpayment to Deposit Account No. 500845, including but not limited to, any charges for extensions of time under 37 C.F.R. §1.136.

Respectfully submitted,

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Dated: _June 21, 2005_

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Page 19 of 19